

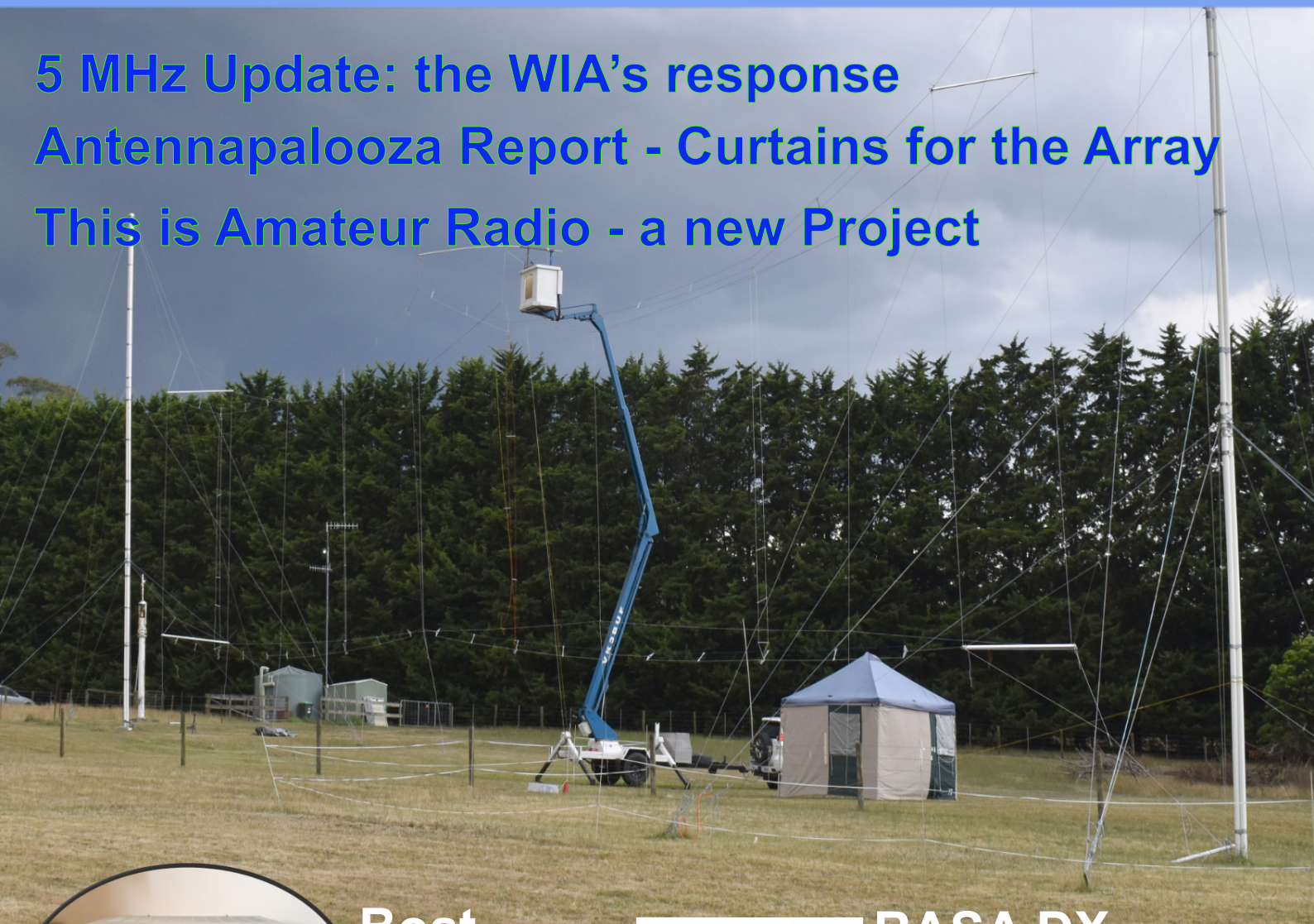
The Radio Amateur Society of Australia



QTC

March-April 2025

5 MHz Update: the WIA's response
Antennapalooza Report - Curtains for the Array
This is Amateur Radio - a new Project



**Boat
Anchors
Projects**



**RASA DX
Contest 2024
Winners**

Going Portable on the Beach - From Pete M3KXZ

QTC March-April 2025

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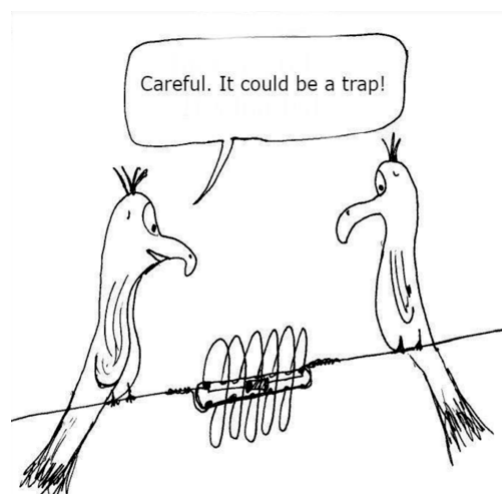
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Drone photo by Peter VK3DEL

Contributing Items For QTC Magazine

QTC Magazine welcomes contributions for future editions. When planning to submit an article, please read our submission guidelines first.

Following the guidelines will save you and the editing team a lot of time and effort. The guidelines are [HERE](#)



From the President



Paul VK2APA

What makes an effective National Body Organisation? - Values and Behaviours

Values such as Integrity, Innovation, Accountability, Honesty, Respect, Passion, Trust, Teamwork, Leadership, Openness, Diversity... and many more..

As a national body, RASA aligns its actions with these values, which is why the recent social media comments and other communications have caught us off guard.

60 Metres

RASA has been advocating for Australian Amateurs to have access to spectrum on the 60 Metre Amateur band allocation as ratified by the ITU in 2015. Australia is a big country and there are extensive allocations of the 5 MHz spectrum used by numerous mobile and fixed services, and the Australian Department of Defence. Encouraged by members, RASA submitted a proposal for a trial to the ACMA way back in 2018¹.

Since the article ***“Why we don’t have 60 metres in Australia”*** <https://vkradioamateurs.org/why-we-dont-have-60-metres-in-australia-full-disclosure/> was published there has been quite a reaction both positive and negative.

When researching something as important as Australia’s lack of Amateur Radio access to 5 MHz it is imperative to be thorough and transparent in your research and cite your sources. This all started in late 2015, so relying on memories and hearsay is fraught with inaccuracies, from assumptions and embellishments, as these memories are recalled and passed on.

I (and others) peer reviewed the material before the articles release and found the language to be respectful and the tone to be reasonably neutral. The content accurately addressed the events that took place during the 2015 ITU World Radio Communication Conference (WRC-15) on November 27, 2015, and included relevant references.

The response to this has resulted in a number of people from the past and present, making unsubstantiated claims that are accepted as gospel in some quarters, while RASA’s peer-reviewed news, complete with credible references and documentation, are brushed off as mere hearsay.

Many of the references in the RASA article are to the WIA’s own website, the WIA magazine “Amateur Radio”, communication with the ACMA and a response letter from

¹ Letter to the ACMA - “Planning Changes in the 5 MHz Amateur Band” to David Brumfield 3/12/2018

the Department of Infrastructure, Transport, Regional Development Communications and the Arts, and all are irrefutable facts!

It was apparent that this is a knee jerk reaction to what was perceived as an attack on the individuals in office rather than the WIA culture. That is not the intention, rather an opportunity to correct the past, address the lack of process and good governance that allowed it to happen and move forward. Blame games achieve nothing and are destructive.

However, the leadership at the WIA has a responsibility to be honest and accountable to its members and the broader AR community.

I can assure you that both I and the RASA management team have more important matters to attend to than concocting tales. If RASA reacted to every "attack" directed at us, we wouldn't have much time left for anything else.

This is not about creating divisions; it is an opportunity for us to come together and collaborate for the advancement of Australian Amateur Radio.

RASA was formed in 2018 with the objective of closing the representation gaps with the regulator and strengthening the support network for Australian Radio Amateurs. It was initially thought by the founders that RASA would not be needed for long, as the WIA was expected to emerge from its troubled times as a revitalised, modern and innovative organisation.

As we reach 2025, I note that there have been some big changes within Australian Amateur Radio, but some things remain as they were. The continuing interest and support shown in RASA demonstrates that having an alternative to the WIA is still seen as necessary by the VK AR community. One could contend that a touch of (friendly) competition is beneficial for our hobby. Imagine the possibilities that could arise from collaboration?

My closing remark in my peer review of the 5MHz article was;

"RASA is keen to work with the WIA and other organisations and we invite all of the amateur community to contact us with their thoughts and ideas.. Working together to reinvigorate and strengthen the hobby."

Scott, I am looking forward to your reply regarding my email and the attached document.

73

Paul VK2APA

[Disclosure: A significant part of Paul's professional career has focused on Defence electronics, with a specialisation in the support of VLF to UHF Naval communications.]

Some thoughts;

- A Fact is (accurate) information without Emotion.
- An Opinion is (accurate) information shaped by Experience.
- Ignorance is an opinion without Knowledge, and
- Stupidity is an opinion that rejects the Facts.

Editorial

Can you believe we're into Autumn already? The seasons seem to be moving quicker and all our friends are getting older. Is it an illusion, or does time in fact speed up a little as we age?

There are so many people doing so many interesting things in our hobby, from restoring and operating older radios, constructing massive wire antenna arrays, operating portable in ways we never thought possible, making new personal best scores in contesting, chasing new ones with digital modes and optimising radio stations, and of course, our favourite, DXing and operating Morse Code. Social Media isn't all bad. On some of the Facebook pages we see some really inspirational activities, photos, videos, and people helping others out. (It's not all bad on Facebook!)

Here at QTC we try to bring a balance of articles from insights into the engine room of our hobby, through to strategic and policy matters that impact us all. We also do our best to find that elusive balance between making articles too long and tedious to read, but detailed enough to be interesting, informative, and entertaining.

To ensure we have the balance right we need two things from our readers:

1. Contributions - even if its a simple article with a view pictures - we can look after editing and filling in the gaps
2. Feedback - send us an email. Tell us what you like and don't like. Tell us why so we can adjust our sails

If there is something specific you'd like to see in QTC please let us know.

This month we provide updates on lobbying activities by both RASA and the WIA, and we continue to encourage the WIA Board to support Scott (WIA President) in his genuine endeavours to work together with RASA for the benefit of all VK Amateurs, irrespective of "politics".

There's also our regular columns, news, updates on the RASA HF DX Contest, as well as an inspirational story by Ian VK3BUF on the monster Curtain Array he constructed for Antennapalooza this year.

The other major story is the pilot project being rolled out by RASA, first announced at Antennapalooza last month. It's a new initiative designed to showcase the depth and breadth our hobby to the general public, newcomers and existing Amateurs looking for something new. "***This is Amateur Radio***" is a website providing a detailed insight into the many facets that make up our hobby. Please read the article, visit the website and send us your feedback. Email us at info@ykradioamateurs.org

On the ACMA front, RASA continues to lobby for higher power and access to 60 metres. Hopefully we'll have more news on this next month. Stay tuned, and see you on the bands.

73, Bob VK6POP & Chris VK3QB
QTC Editorial & Production Team

5 MHz Update: the WIA's response

Since we published our most recent news item about 5 MHz on the 16th February, the faux outrage from some WIA supporters has been quite concerning. We are witnessing a complete denial of the facts and a circling of the wagons. What we don't understand is why the WIA simply doesn't verify the facts that RASA has presented and then provide an explanation to members and the broader community.

Are they just digging themselves a deeper hole?¹

The only voice of reason has been serving WIA President, Scott Williams, who assured us in a phone conversation on 21st February he had no knowledge of the Australian Delegation's WRC-2015 decision to deny Australian amateurs access to 5 MHz. Further, Scott was clear that he wants to see the "noise" and unhelpful commentary cease, and for the WIA and RASA to work cooperatively on a joint 5 MHz proposal with the Department of Defence.

We suspect it is these facts that are the cause of so much consternation at the WIA.

The evidence is very clear. There was a decision by the Australian Delegation members to deny Australian amateurs access to 5 MHz "in perpetuity" at WRC-2015.

²The Department of Infrastructure, Transport, Regional Development Communications and the Arts (the Department ultimately responsible for Australian positions at World Radio Conferences) has confirmed that **"the Australian Delegation agreed to protect Defence's interests in the 5 MHz band in perpetuity"**

The WIA reported that this meeting took place. That is not contested. But they only reported selected facts from the meeting; not all the facts. There are two plausible reasons for this oversight and denial by the WIA.

It is possible that the WIA specialists and former Presidents knew nothing about the Australian Delegation's decision. The second is an unwillingness to share the whole truth with members. We don't know which it is, but there are examples of where the WIA has sought to gaslight issues they don't like in recent years.

In addition to the serving President of the WIA, it's clear from Facebook posts that WIA Spectrum Management representatives claim to know nothing about this decision, and the same goes for a former WIA President. Does anyone in the WIA Management team know what went on?

Where to next?



This map shows all the countries that currently have an official Amateur Radio presence on 5 MHz / 60 m, whether it be by WRC-15, Article 4.4, Special Individual Permits, Trial and/or Emergency Basis, or any combination of these.

¹ *The law of holes, or the first law of holes, is an adage which states: "If you find yourself in a hole, stop digging." It is used as a metaphor, warning that when in an untenable position, it is best to stop making the situation worse.*

² *Letter from Department of Infrastructure, Transport, Regional Development, Communications and the Arts to RASA, 2 April 2024*

Paul Anslow VK2APA (RASA President) has contacted Scott Williams VK3KJ (WIA President) requesting a meeting to discuss the issues in greater detail. We understand both Presidents genuinely want to work cooperatively, and they have both publicly stated as much on more than one occasion.

Regrettably, we believe a strong faction within the WIA continues to undermine Scott's efforts.

This latest manifestation of poor behaviour continues to highlight that the WIA isn't changing.

Three Presidents have all attempted to change the place for the better, but continue to run up against roadblocks. If we all want a strong representative WIA, it will need to change.

If you agree with this, send an email to Scott and the Directors; change must be driven by the membership base.

And if you're having trouble accepting these observations, just look objectively at how little the WIA has achieved in the last ten years.

And for the record, we are not attacking any individuals, some of whom work tirelessly for Amateur Radio. We are, however, very concerned with the continued poor performance of the WIA when it comes to effective leadership, representation and transparency with members and the broader VK community.

Please talk to the WIA President and ask him how you can help. Or email us and we'll engage in a constructive discussion.





THIS IS AMATEUR RADIO

RASA's new project, "This is Amateur Radio" (TIAR) <https://thisisamateurradio.com/> has been under development for a bit under a year, and is now in its proof of concept stage, with recent announcements and presentations about TIAR at club meetings.

RASA is seeking feedback on the following:

- Does the website render and format for easy viewing on your preferred browser or device (eg. Chrome, Firefox, Edge, Safari / Desktop, laptop. iPad, Android, Smartphone etc will be dealt with later.
- Which audience do you think would benefit most from this resource? (eg. general public with no prior knowledge of Amateur Radio, General public with a fundamental understanding of our hobby, Radio amateurs and clubs looking for more information, other?)
- Is there enough detail provided on each topic in this resource? Too much, too little, about right?
- Overall, what is your impression of the resource at first glance?
- Any other feedback you may have, be it positive, negative, constructive, or simply your general comments about TIAR and the concept.

As with all RASA resources, we value feedback from everyone in the Amateur Radio community. Please send your comments to info@vkradioamateurs.org. If you prefer your feedback to be anonymous, please mail your comments to RASA President, Paul Anslow VK2APA. His mailing address is on www.qrz.com

Background:

In 2021 RASA conducted a strategic review of Amateur Radio in Australia. A detailed report was released in November of that year. One prominent finding from this review was the out-dated way in which Amateur Radio is perceived by the public.

To paraphrase:

"Ham Radio is mostly just old guys talking into microphones"
"Any modern mobile phone can now do the same thing – only better."

The true extent of the knowledge and technology behind Amateur Radio is unknown to most people.

We have other issues to address. Many newcomers assume that the subject matter in the exams define the limits of Amateur Radio. The progression from **Foundation** to **Standard** and **Advanced** qualifications are not always clear and can be perceived as having minimal or limited value.

We must address these shortcomings as a matter of priority.

There is a vast range of Amateur radio activities and challenges that never appear in the exams or public relations material. Often both new and established amateurs are unaware of these prospects and drift away from the hobby.

Clubs are very important

The real engine room of Amateur Radio in Australia are the clubs. One of RASA's objectives is to assist clubs by making resources available to increase the appeal of the hobby across the country.

In mid 2024 RASA began developing the ***This Is Amateur Radio (TIAR)*** concept. It is a new and large resource designed to illustrate the full scope of this amazing hobby. It contains around 250 boxes or 'tiles' which present activities or areas of study that make up the Amateur Radio. Visitors to the website can click on any of these tiles to understand the basics and where to learn more.

Perhaps for the first time, a single website reveals the true scale of Amateur Radio



and its rich tapestry of science, technology, ongoing self-development, and the fun and excitement of mixing technology with other hobbies and personal interests.

If someone asks you "*What is this Ham Radio stuff all about?*", it can be really hard to give a meaningful answer. Instead, give them the link to this site, or show them your wall poster. This will help improve understanding of the true scope of Amateur Radio.



This site is intended to represent a full view of Amateur Radio as it stands today. It is not yet complete. Content is being added daily. If some aspect is missing, it can be added. Visitors are encouraged to submit Amateur Radio related activities of their own for inclusion on the site.

The tiles are divided into four colour-coded areas of interest:

1. What you need to know to achieve a **Foundation** qualification. (Blue)
2. The knowledge beyond Foundation required to achieve a **Standard** qualification. (Yellow)
3. The knowledge beyond Standard required to achieve an **Advanced** qualification. (Green)
4. **Activities and extracurricular fields of study** that are a part of Amateur Radio, but not part of the Exam process. (Grey)

The Grey tiles are the most important of all. The grey tiles are a window into the many activities and challenges that Amateurs can embrace. More

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experienced Amateurs can browse all these topics when seeking new technical or operational areas of interest.

Filters will be created soon

As the site develops, filters will be added to highlight the tiles that encompass a theme. One click will reveal topics such as DX, antenna design, outdoor pursuits, electronics... you get the idea.

Each tile has been allocated a page number that can be used independently. Below the introduction a special link tile lists all of these page numbers.

A downloadable Wall Chart

To compliment the shack wall, a free downloadable wall chart is available. As a poster it conveys the broad reach of Amateur Radio. It will immediately demonstrate to visitors that what we do is much more than just a microphone, a radio, and an antenna.

A shortcut to the Amateur Syllabus

There is an **Exam Syllabus Bar** on the home page which links directly to the ACMA syllabus documents. These documents define the scope of Amateur Radio exams. For improved clarity, the syllabus information has been extracted from the original pdf table and presented here in a web page format.

Foundation Syllabus

Standard Syllabus *

Advanced Syllabus **

Activities & Studies

Inside the Tiles

When any tile is selected, a sub-page will open in a new browser tab. The page will provide a description about the selected topic and links to where more information can be found. Many of these pages contain embedded YouTube clips. A click on the RASA logo on any page will return the reader to the main site.

Where a TIAR tile contains examinable content, relevant extracts from the syllabus are included. This helps the reader to determine the full scope of what must be known on a given topic, without having to venture deeper than what is required for that qualification.

P187


The Radio Amateur Society of Australia

An Introduction to Morse Code



The International Morse alphabet was adopted in the 1850's as a method of encoding text as an interrupted current pulse in a long wire. This was the Telegraph. It was a natural progression to extend its use to radio waves as an **Interrupted Continuous Wave**, abbreviated as ICW. Over time this has been abbreviated to simply CW. (This is probably a good thing, as ICW is now the recognised abbreviation for Insane Championship Wrestling)

International Morse Code

1. The length of a dot is one unit.
2. A dash is three units.
3. The space between parts of the same letter is one unit.
4. The space between letters is three units.
5. The space between words is seven units.

A 

B 

C 

U 

V 

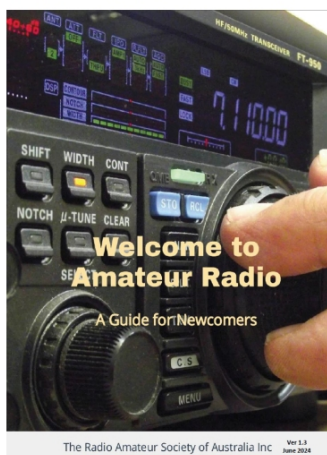
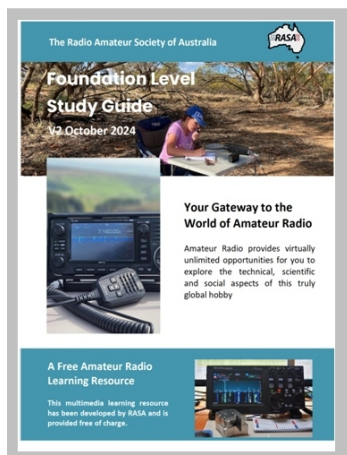
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As of February 2025 all of the blue Foundation tiles contain fully linked content, whilst the Standard and Advanced tiles are still under development.

Links to the Foundation Level Study Guide and Welcome to Amateur Radio

RASA has already published free educational resources for Amateur Radio. Many of the Foundation tiles will link to appropriate sections in the **Foundation Level Study Guide**.

The **Welcome To Amateur Radio** guide book was produced to assist new amateurs in getting their station up and running for the first time. Several tiles related to this content will link to appropriate pages of this manual.



Since 2020 the **QTC** digital magazine has had many feature articles on technology, projects and Amateur Radio adventures. Where this content corresponds with tiles on the **TIAR** main page, direct links to the appropriate page on the digital flip-magazine have been added.

Similarly, there are tiles that deal with various aspects of tracking down and eliminating noise and interference

affecting your listening experience. These tiles will link to corresponding content within the specialty website, **QRM.guru**.

The future of *This Is Amateur Radio*

Our goal is to bring interested people to the site and let them browse the broad capability of Amateur Radio for themselves. This site presents all that Amateurs do in small bites and shows definitively where the boundaries of exam content begin and end. For beginners it should help them on their journey to qualification. For established Amateurs, it can be like a supermarket of new things to try. Check it out.



Look for development news about this site

A regular feature will appear in QTC providing updates on TIAR news and stories of how clubs and individuals are using this initiative to their advantage. If you are a member of a club and would like to know more, contact info@vkradioamateurs.org. It may be possible to organise an internet Zoom meeting, or a presentation in person from one of the RASA team.

TIAR is a Living Resource. Do You have something to contribute?

We are fortunate to have many Amateurs in Australia with incredible knowledge and experience. If you believe you have content that will contribute to a page, or have knowledge of an emerging technology you wish to share, we'd love to hear from you



(Editor's note: TIAR is an evolving resource. We welcome your feedback and comments - especially from newcomers and members of the general public. Please email info@vkradioamateurs.org). The website again is [HERE](#)

Boat Anchors

With thanks to Dean, VK5LB for this article

I bought a Yaesu FL-2100b amplifier in 2019. It was a bit of a project and was suffering some problems.

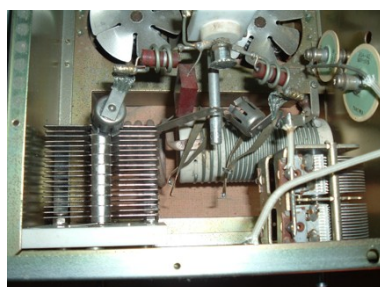
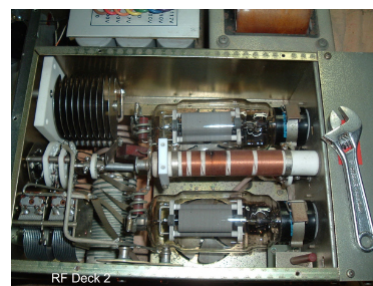
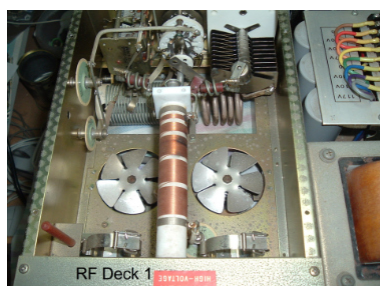
The Plate Choke was burnt, the bandswitch was missing a wafer, the padding capacitors were cracked and it needed a lot of work. The plate tune air variable capacitor suffered an arc but was still serviceable after cleaning and grounding correctly. Surprisingly the 572b valves were still providing full output.

The biggest job was removing the melted wafers and fitting new replacements. I used a miniature nut and bolt instead of a rivet to avoid any likelihood of cracking the ceramic former.

I've provided some photos - as they say, a photo tells a thousand words.

There is the VK5 based Boat Anchor Net Tuesday nights 3.620 MHz @ 1000 UTC or 2000 Australian Eastern Daylight Time. Everyone is welcome to join.

Cheers, Dean VK5LB



Are you chasing parts for your Kenwood Hybrid?

If you own a Kenwood Hybrid (eg. TS-520, TS-820, TS-830) this may be of interest. Obtaining replacement parts is becoming more and more difficult. This enthusiast is providing a good service from the USA; the problem of course is the shipping costs, being USD\$30.

If you're after parts for your Kenwood project radio, or simply want spare parts for the inevitable failure (eg. lamps, shaft couplers etc) please check out this site. If you'd like to join Phil VK3VB and I in an order and save on postage please let us know.

[K4EAA Parts Page](#)

Send Phil and me an email with your shopping list and we'll be in touch with more details. Orders need to be in by the 21st March.

73, Chris VK3QB vk3qb(at)hotmail.com ppavey(at)bigpond.com



HamCamption

is what the name suggests. Hams out camping. The venue is the Mayanup Sports Ground, a short drive from Boyup Brook in WA's South West.

DATE: 16-17-18 May. Move in from 1pm Friday.

COST: \$10 per person per night

Accommodation: Your tent, camper, caravan, swag. Unpowered.

Facilities: There are powered ablutions with hot showers, and a powered camp kitchen.

HAPPY Easter

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Constructing a HF Curtain Array for the 20 Metre Band

By Ian VK3BUF

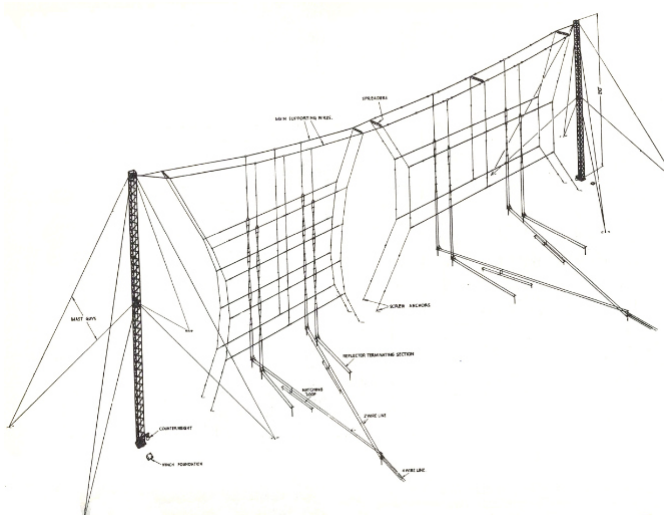
Every 12-18 months *Antennapalooza* ([Antennapalooza](#)) is staged about 80km East of Melbourne. This is a fun field weekend where visitors bring caravans, tents, or swags, and set up for two days. Presentations and demonstrations take place in an on-site pavilion, and there's time to catch up with friends. At night there is a campfire and take-away pizza. This year was the ninth Antennapalooza and about 75 people attended over the two days. Each year there is a theme, with a focus on projects that would usually be hard to do in a suburban backyard. In the lead up to this year's event we wanted to try something a bit more unusual. The challenge was *could we build a Curtain Array for HF?*



A little background is needed here. Curtain Arrays were usually constructed by governments to service high power, long distance communications. Variations of this antenna started to appear about a century ago. There were Sterba Curtains, Bruce Arrays and others. Typically stretched between 100 metre tall towers, they were a tangle of wires and cables. Essentially they were clusters of dipoles phased

together in matching orientation, fed with open-wire feedlines. These were first designed in radio pioneering times and many such arrays were not very efficient, but high transmitter power compensated for that.

The image to the right is a Radio Australia Curtain Array located at Lyndhurst, South-East of Melbourne. It was a serious monster antenna, spread over 5 acres, and used for overseas broadcasts on 9, 11 and 15 MHz. These were not for the faint hearted!

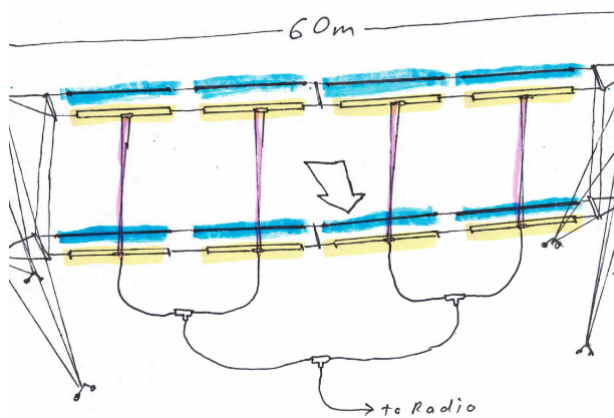


Our challenge was: Could we build a low-budget baby Curtain Array for the 20 Metre band to play with for just a couple of weeks? Could we make it work? Could we have it ready in time for Antennapalooza?

The preparations began...

If we could erect some poles about 20 metres high, with pulleys at the top, then maybe we could hoist up an arrangement of eight dipoles on the 20 Metre band, each with a matching reflector for forward gain.

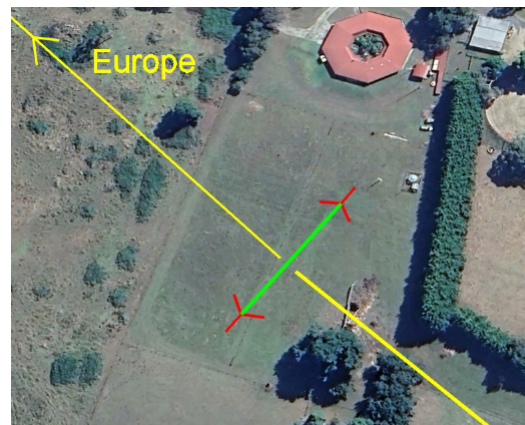
I would like to say that we did all sorts of 3D modelling and high-res CAD drawings, but our master plan was a hand-drawn sketch on the back of an old envelope and we just worked with that.



This baby Curtain Array was still going to need 60 metre spacing between the masts. Folded dipoles offered advantages over simple dipoles. The feedpoint impedances were higher and this would be a better match for coupling the lower dipoles to the upper dipoles, a half-wavelength higher. The wire reflectors were 5% longer than the driven elements, spaced at three metres. Essentially it was a collection of eight 2-element beams, all pointing in the same direction.

Next we had to pick a direction. From South-Eastern Australia, Short Path to Europe seemed like a good idea at the time. It looked like this:

Our land at Drouin West has a down-hill slope towards a creek, which meant that one mast was going to be higher than the other. We dealt with that problem by ignoring it. This positioning also meant that it was going to straddle a barbed wire fence. That was trickier because cows and antenna guy ropes are not a good mix, so an electric fence was placed around the southern pole.



With a plan in place the next step was organising materials – on a budget. In 2015 we tried out a Rhombic antenna on masts 12 metres high made from single lengths of 90mm PVC stormwater pipe. That sort of worked ok. By sort-of it meant that some big winds broke the masts. New plan. These PVC pipes are 6 metres long and \$22 dollars each. If we taped three of them together with duct tape, then stacked three more on top, then another three more on top of that, we would have 18 metre masts. What could

possibly go wrong? A quick trip to Bunnings and we were ready to go.

The masts needed guying points, as well as attachment points for the antenna pulleys. That was a bigger problem. I consulted a friend in a nearby factory and we were able to machine six aluminium guying plates out of 6mm sheet. Looking good.



A lot of rope was needed. eBay had 400 metre rolls of telecom rope for \$40 each. I used three of those. 1200 metres of rope was about right.

There was going to be a lot of stress on these ropes and they had to attach to the ground somehow. I had previously used spiral 'Ground Grabba' stakes for the Antennapalooza pavilion and they worked really well when used in pairs, screwed into the sub-clay with a little bit of chain between them to share the load.

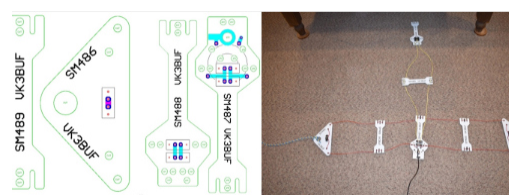
They were expensive, but essential. One of these can be seen on top of the rope stack.

Next we needed a whole mess of wire. About 350 metres of it. I scrounged up a roll of 1.5 square mm plastic coated electrical cabinet copper wire, but I needed more. I visited a nearby electrical contracting company and asked nicely for any dregs of half or quarter reels in whatever peculiar colours had not been used in the past decade and collected enough wire to do the job. Historically Curtain Arrays were always fed by open wire feedlines on posts. That looked really complicated and I didn't want to do it. Instead I went with 1:1 baluns at the four lower feedpoints, tee pieces and a mess of 50 ohm coax cut to half-wavelengths on 20 Metres. We used most of a roll of RG58 and a bunch of PL259 crimp connectors. (Yes, we did compensate for Velocity factor)

The advantage of the manifold feed system with tee pieces is that if you fool around with lengths somewhere between quarter and half wavelengths, you can get some nice impedance transformation and establish close to 50 Ohms at the common feedpoint. This arrangement also lets us hoist the antenna and unplug the coax to cut the grass. Curtain Arrays laying in the grass meeting slashers on tractors would not end well.

There was just one remaining part required to make this antenna work.. It needed brackets and spacers to hold the dipoles and feeders together. This was a tricky one. However, being a fan of circuit board design, I drew up designs for feedpoint terminal brackets, terminating brackets, and spacers. These would be machined from 3mm circuit board material. I emailed the file to my favourite producer in Shenzhen and they turned up a few weeks later. On arrival a small non-resonant mockup was made to test the mounting points and cable tie holes.

By now Antennapalooza was quickly approaching., Step one was to build a folded dipole, get the length right using a Sark Antenna Analyser, (compensating for the PVC insulation) and then make seven more.



The work was becoming more physical and we were getting into the warmer weather. The grass was cut low in the antenna area. All the ground anchors were screwed down and the masts ready to be erected. Fortunately we have a boom lift that I rescued a few years earlier and refurbished. Great for tree trimming and an instant portable tower, but it only goes up 12 metres.

We joined the first two stages together with more duct tape, and prepared the guy ropes. Dianne VK3JDI wrapped her arms around this assembly while I sent it all up 10 metres in the boom lift. I then tied truckie rope hitches to all the guy points which worked well. So we used the same approach for the second mast



Getting the third stage up was a bit harder as the boom lift topped out at 12 metres. To overcome this limitation I fabricated a PVC pipe clamp which provided support and leverage, enabling the team of volunteers to raise and attach the third stage successfully.

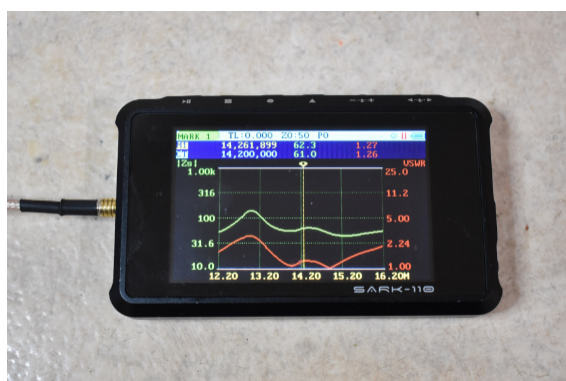
Now we were cooking. The masts were up and the antenna was assembled on the ground ready to haul into the air, just in time for the field weekend. Once raised, a new problem



became apparent. Because the masts were plastic, there was a limit to how much guy rope tension they could withstand. The array sagged a bit in the centre. Ideally we would have put up a third pole, but instead we cheated and just used the boom lift.

The 1:1 balun and manifold feed system of coax worked well. The antenna analyser confirmed we were resonant and impedance was well within range of the transceiver antenna tuner.

There were two dips on 20 Metres. One for the dipoles and one for the vertical phasing harness between the dipoles. Impedance was around 60 ohms. Close enough. We were ready to go!



Just two days before Antennapalooza, the weather forecast predicted high winds and 40mm of rain over the weekend. We had done the drowned rat and bogged car thing in previous years and it was not going to be fun if we proceeded. Emergency emails were dispatched and we postponed the event until 11th January. This also meant that we had to keep this monster in the air for two months over Christmas and not the originally planned two weeks.

The image below was taken only one hour before the 'final' image at the end of this page.

There were some pretty big storms over the Christmas and New Year period with days approaching 40C causing the poles to soften. We were now in high summer. The grass had changed from green to brown and there were bushfires popping up around the state, making for some hot, smoky, but spectacular sunsets through distant power lines.

Five days before the new Antennapalooza date, another big storm front passed through and dropped one of the masts. We undertook some repairs with PVC pipe joiners, glue, and a hacksaw, and the mast went back up, only 400mm shorter.

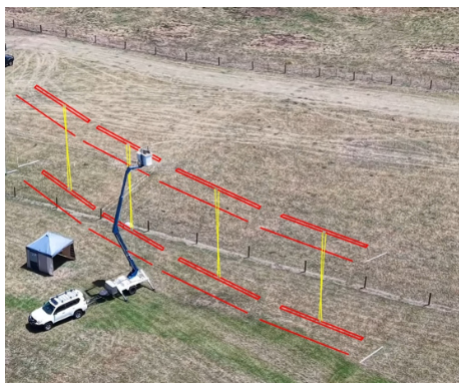


The restored antenna worked well. The 20 Metre band was solid with CW and SSB stations. A couple of visitors flew drones and got some excellent wide shots of the antenna. This image is courtesy of Peter VK3DEL. The wires have been artificially highlighted, as they tend to disappear when photographed against the grassed background.





A make-shift radio shack was erected with a 3 x 3 metre gazebo. Many hundreds of contacts were made over the weekend. Jordan VK3ACU made a recording of the extensive CW activity on 20M. You can watch this here: <https://www.youtube.com/watch?v=4I9E2sSa674>

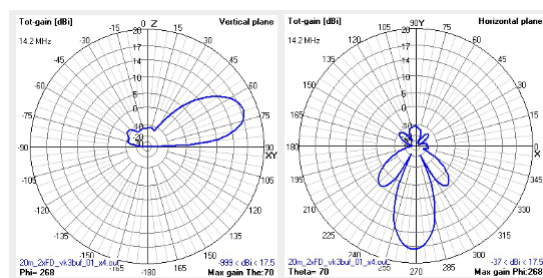


Dieter VK3FFB constructed a software based model of the antenna. Notionally it had a forward gain of 17.5 dBi and a peak radiation angle of around 20 degrees from horizontal. We planned to conduct tests to see how closely the antenna would follow the model, but fate intervened before this could be done.

After the last presentation

on Sunday, visitors were packing up and heading home. That's when another wild storm front hit, with peak gusts around 90 kph.

This was too much for one of the masts. The lateral stresses were huge and the South end of the array came crashing down. Geordie VK3CLR was quick enough to capture this calamity on video.



This was unfortunate, as whilst the antenna survived the weekend, the plan was to operate it for another few weeks and carry out additional performance tests. The region around Melbourne is notorious for dramatic changes in weather. It can go from cloud free and sweltering to hailing sideways in high winds, then back again to a gentle breeze – all in one



day. This had been a particularly variable season and the array had survived numerous weather fronts, only to come unstuck when as the weekend was coming to a close.

Over the next few days the second mast was (carefully) dismantled and all rope and wire was bundled into boxes. Although the antenna's life-span was brief, the process of constructing, testing, and using this antenna was a fruitful learning experience. The process undertaken here makes one have respect for the work (and the budget) that goes into the giant HF commercial arrays, usually viewed from a distance.

Taking the time to apply such a design to an Amateur Band was a load of fun. It only happened through the labour and encouragement of many amateurs. Ultimately this is what our hobby is all about.

Supplementary Links:

An interview about the antenna and drone footage:

<https://www.youtube.com/watch?v=oyYqoTKnL5s>

Drop Table Adventures clip about Antennapalooza:

<https://www.youtube.com/watch?v=qfRjSul8KyQ&t=1s>

Erratum

From Iain, VK5ZD:

Just an observation on the president's report in the Jan-Feb 2025 QTC edition. On page 3 he states, "It's also worth noting that 70cm and above, our allocations are all Secondary; so we have no right of interference free utilisation of these bands."

This is not correct. Amateurs are the primary service on:

24.000 - 24.050 GHz

47.000 - 47.200 GHz

77.500 - 78.000 GHz

134.000 -136.000 GHz

248.000 – 250.000 GHz

Thanks Iain for setting the record straight. Ed.

RASA DX Contest

Results for 2024

It took a little longer than anticipated to collate and assess the final scores for the RASA HF DX Contest 2024.

Congratulations to the following:

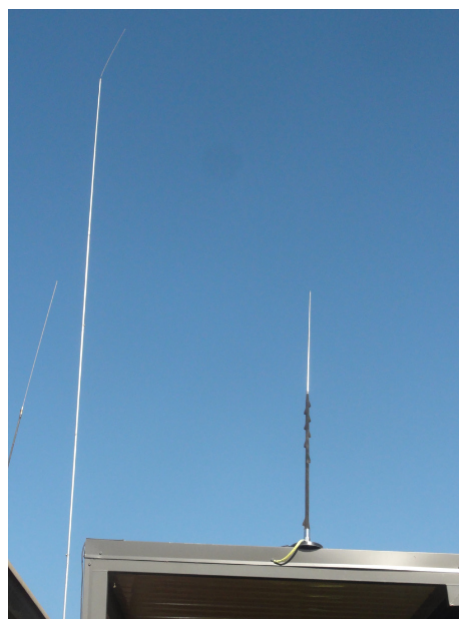
Winner Digital Modes - Alan VJ6X
Winner Mixed Modes - Klaus VK3IU/VJ3U
Winner CW Mode - Chris VK3QB
No SSB Only Entrants

A very close second in Mixed was Alan VK4SN and VK4MGL in third.

Well done to all.



Alan VJ6X Shack and Antenna



RASA HF DX Contest for 2025

This year the format will be as simple as it gets, making it easier for contestants and the contest administrator.

Objective

The objective of this contest is to encourage greater participation and activity on the MF, HF and 6 metre bands. The contest is deliberately designed as a long form event, as many amateurs are unavailable for the more traditional contests held on weekends. It also provides the opportunity for those who like to operate in a more relaxed fashion to still take part in a national contest. This also allows amateurs the opportunity to use their 2×1 Contest Callsigns, a great way to attract the interest of international stations.

All QSOs from 1 January 2025 through to 31 December 2025 are eligible. Just make sure you upload your log to Clublog and register for the RASA Club Leagues table.

Once again we'll have participation prizes for just having a go, and a special participation prize just for CW operators. [Read more here](#)

The CW operators participation prize is a Begali paddle, pictured right.

If you have any questions about this contest, please send us an email. [info\(at\)vkradioamateurs.org](mailto:info(at)vkradioamateurs.org)



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Dits n Dahs

By Chris VK3QB

Morse code continues be active in our region.

Received just this morning (4th March) this note from Pete M3KXZ via Facebook

"Couple of nice unexpected DX 20 m QSOs this morning from Tide Mills, near Newhaven. I didn't think band conditions would be that great as didn't get set up until well past 0800 UTC, but VK2COS Rob and VK3DBD David were both fantastic sigs here, and great to work.

My set up was the usual LAB599 running 5 W, and cut antenna I was using a wire 1/4 vertical on a fishing pole with feedpoint at 2 m height, and a single elevated counterpoise.

WX started very foggy and temp was 0°C. Maybe not the best beach weather. But the cold air and not having to talk was helpful to my breathing (got really bad flu or something right now that won't go away so off work ill).

73 M3KXZ
FISTS #1692"

Pete is an inspiration for portable QRP operators, and I'm always amazed when I hear his 5 or 10W here in my shack. More often than not a very respectable and readable signal.

In policy news we are keeping an eye on the WIA/IARU Region 3 program to review the 40 metre Band Plan. This initially controversial review was finalised and taken to the IARU Region 3 Conference last November.

There has been no update from the WIA since the November conference; other than a Facebook post in February where they refer to working their fellow IARU Region 3 member societies as being akin to "herding the cats". I'm not sure how our fellow IARU representatives feel about this analogy.

If you've forgotten this program, follow [this link](#) to learn mor

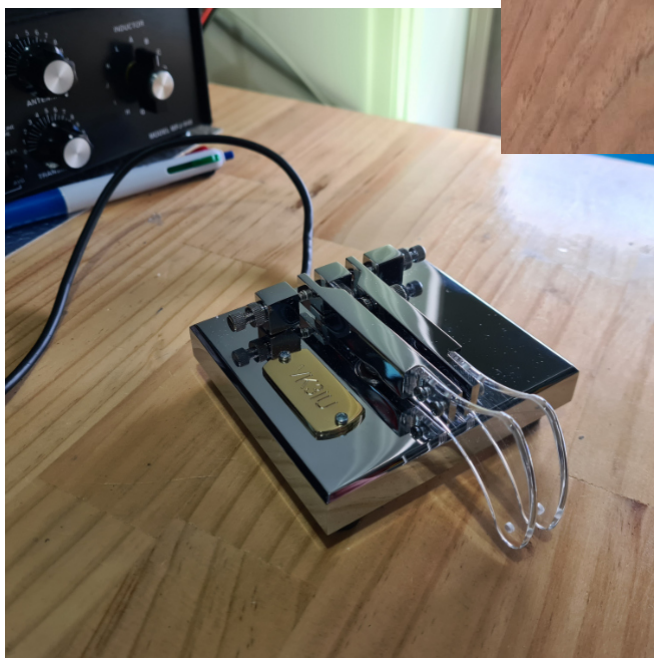
FISTS Down Under Awards

It's not too late to join in on the Friday evening QSO Parties. Starting at 0800 for three hours the aim is to have relaxed QSOs, not just with locals, but anyone. However, it's a great opportunity for VK and ZL operators to catch up with each other and improve their skills. You can read more about the Award [here](#).

Rank	Callsign	Slots	160m	80m	40m	20m	15m	10m	6m
1	VK5GG	154		1	40	60	38	15	
2	VK3OU	99		3	30	26	25	14	1
3	VK2COS	76			8	42	12	13	1
4	VK3HJ	46	3	2	5	19	7	10	
4	VK3QB	46	1	2	21	19	2	1	
6	ZL4TE	41			9	12	19	1	
7	VK4DRK	23		1	3	16	2		1
8	VK3VB	22	1	1	5	8	5	2	
9	VK3NOP	17		1	5	10	1		
10	ZL2AIM	9		1	3			5	
11	VK1AAF	2			2				
12	VK6WX	1		1					

Also on FDU Awards, the Worked Most Slots Award is off to a strong start in 2025, with Graeme VK5GG leading the charge. Once again Graeme is doing a great job and demonstrating what can be achieved with an IC-7300, 100W, and a vertical antenna (with 32*3m radials) - an efficient station and well honed skills. Congrats Graeme, keep up the great work.

Feature Keys: NATO Key made by Pryce Edwards in 1991. from Graeme VK5GG



Feature Keys: Ukrainian Paddle made by UR5CDX from Klaus VK3IU - with Klaus' callsign nicely engraved.

Thanks for sharing these photos Graeme and Klaus

Monthly VK/ZL Morse Zoom Sessions

Are you new to the code? Maybe you're working on developing your skills, or coming back and picking up a lost skill? Or maybe you just love the code and would like to join in.

I am convening a monthly Zoom session for Morse Code operators with support from CW Ops and RASA. Our technical topic for the month will be Boilerplate QSOs. Read more about this initiative and how to join [here](#).

If you have any questions or suggestions please drop me an email. [vk3qb\(@\)hotmail.com](mailto:vk3qb(@)hotmail.com)

Improving your CW Sending and Receiving

Sending

Make it a daily habit. After the morning coffee, commit to ten minutes of sending practice.

Ask a friend or another member for feedback. Or, put a short note on your qrz.com profile that you welcome feedback.

Hopefully, most of us listen to CW at least once a week. My shack is also my office, so I have common frequencies running most days.

Be aware of bad habits that easily creep into your sending. Typical examples include:

- Running together letters in your callsign, name or QTH – phrases or words you send are often prime candidates for falling foul of bad habits.
- Another gremlin to watch for is bad timing. Nothing makes it harder to enjoy relaxed copying than poor timing.
- Good character spacing, but running words together.
Inadequate spacing between words can make copying CW more difficult than it needs to be.
- If you are using a paddle and electronic keyer, you are assured of excellent dit & dah formation – your failings will likely be spacing. Full lambic keying and “squeeze” keying will help, but it needs a lot of practice.
- If you use a straight key, you need practice; try recording your sending and play it back. Ask others for honest feedback.
- It can be all too easy to send faster than you’re comfortable with; and this impacts the quality and consistency of your sending, and may also impact your receiving (its too easy to send faster than you can receive – at the slower speeds)
- If you’re sending too fast, it might sound to others (and feel for you) a bit like you’re running down a hill too fast... your sending becoming just a little sloppy with trips and occasional falls.
- We all have phones capable of recording... try recording your sending and then listening to it. How does the timing sound?

Receiving

There is only one way to achieve your goals when learning and copying CW.

Practice, practice, practice

Easy to say, harder to do. Right?

No. The hard part is establishing a routine and sticking to it. How many other voluntary routines do we follow simply because we find them easy, or requiring minimal effort.... Like surfing Facebook, or the web? Maybe we spend 15 min each morning having a coffee and reading the paper? Walking the dog/cat/chicken/sheep?

If you are serious about mastering the code, you’ll find a way to build 15-20 minutes into your daily routine - five to six days a week. Mobile phones offer all sorts of possibilities to integrate some learning into other routines... like walking the dog/cat/chicken/sheep whilst listening to practice sessions. Maybe take a sandwich to work and spend the time doing your CW exercises whilst eating lunch?

Ditch the rubbish television soaps for eight weeks and replace with 45 mins Morse Code learning sessions. Or join CW Academy.

Book a 15 minute session twice weekly with a CW buddy; integrate learning CW into getting some on-air time.

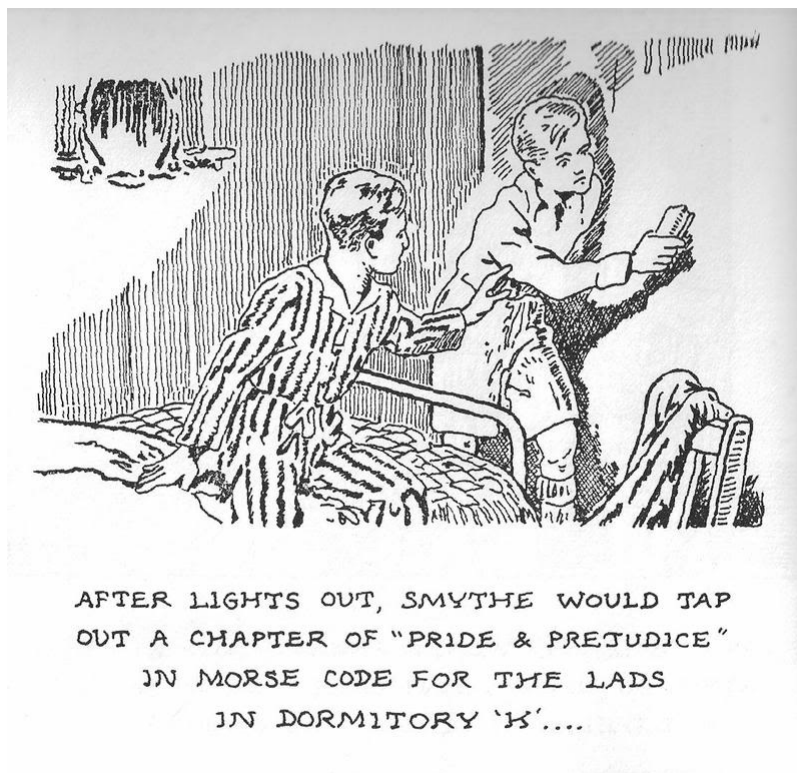
Set a goal – two QSOs a day at least six days a week. Force yourself to either increase the speed a little and/or break into a conversation – even if it's just telling the other op about your station, antenna or wx.

I could go on....

Where-ever you are on the journey to learning Morse Code, your only sure-fire way to success is daily practice.

If you'd like an accountability buddy, just email me and we'll find someone who is willing to work with you to maintain a rigid routine.

So... if you're willing to commit and need some inspiration or just someone to provide moral support, reach out. Your best chance of success is to have someone who can be that little voice on your shoulder. (or inside your head).



The International Morse Preservation Society



FDU Straight Key Day April 25 2025

FISTS Down Under are conducting a special Straight Key event on ANZAC Day 2025, and for non - Aussies, that's April 25th

Times: The event runs from 0001 Local – 2359 Local, which makes it a nice long day globally.

Bands: 160-10m including WARC bands

To qualify for a Straight Key Day certificate, you need to make five (5) or more CW QSO's using a straight key. That's straight forward, yes?

Please forward your log to Graeme VK5GG via email:

graememorgan72(at)hotmail.com.

Remember, being ANZAC Day, the AX prefix can be used by VK operators.

If you're wondering what an ANZAC day is, wander over to this website:

<https://www.awm.gov.au/commemoration/anzac-day/traditions>

Image courtesy
of [National
Archives UK](#)



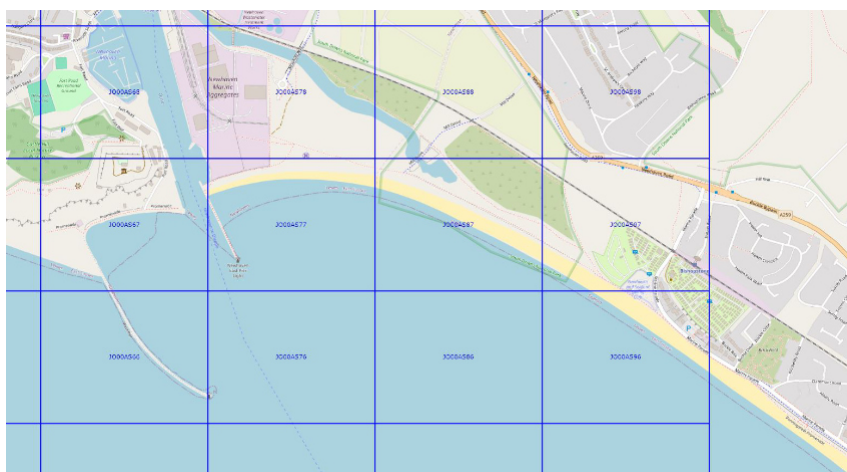
Going Portable on the Beach

By Pete Millis M3KXZ

Comment from Editor: Pete is a member of Fists, a global club for Morse Code enthusiasts. He regularly stops at the beach on his way to work and has QSOs with VK and ZL ops in our early evenings. His activations demonstrate what's possible with 5 W and a simple vertical antenna.

Location

Tide Mills is located at Maidenhead locator JO00AS87, between Newhaven and Seaford on the south coast of England. It is the site of the former Newhaven Marconi Radio Station which was established in 1904, started running in 1905 and achieved regular ship to shore radio communications in 1912. Tide Mills was also the site of an experimental seaplane base with anti-submarine patrols being carried out over the English Channel.



- There are several factors that make Tide Mills so good for my QRP portable operating:
- there is clear take off over the sea from approximately 110 degrees clockwise to 270 degrees
- the beach, like many in this area, is shingle so I don't have to deal with sand getting everywhere
- the beach is huge, generally very quiet, and there is never any problem with setting up an antenna
- the beach slopes quite steeply so there is not really any need to move position as the tide rises and falls
- there is easy access from a small car park, across the railway and along a track between ruins of what used to be the village of Tide Mills, and I can be set up within 10 minutes of so of parking

Of course there is a down side; a complete lack of protection from the elements!

Equipment

My current rig of choice is the Lab599 TX500, which I only ever have set to about 50% power for 5 W output. CW is keyed using a BaMaTech BaMaKey TP-III. Antenna is usually a wire 1/4 wave vertical on a fishing pole with single elevated counterpoise, and is supported by guylines secured to sand/snow pegs that I bury in the shingle. This stands up well to strong

winds that are often blowing. Battery power is just a couple of small 11.1 V (3S) 2250 mAh LiPo packs, with each one lasting for several hours.

Operating Success

There are several places within easy reach of home that, unless there is an HF blackout, seem to guarantee fantastic DX results while running 5 W or less, into a simple antenna. Tide Mills has proven to be the best coastal site for me to work ops in VK and ZL at or around greyline time (UK morning / VK and ZL evening). I have had QSOs with several FDU members, and lots of other great ops in VK and ZL, often 2xQRP.



Attached pictures show my 1/4 wave vertical and the view through the fog that was present on Monday morning when I worked VK2COS Rob and VK3DBD David. Signals were terrific with both Rob and David. David turned his power down to 5 W. Temperature was 0C, but fortunately there was very little wind so it didn't feel as cold as it could have done! Also shown are my rig (on car seat when operating from another location). Tide Mills is shown on the map in locator JO00AS87, and is just inside part of the South Downs National Park where it meets the shoreline.

I'll sort some better pictures out when I get a moment!

Cheers,
Pete M3KXZ

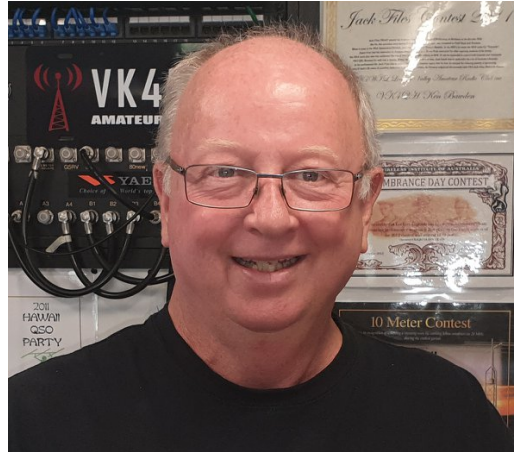
Editor's note: Thanks Pete. With any luck, Pete will keep us updated with his portable operations. In the meantime here's a couple of videos:

<https://www.youtube.com/watch?v=zyBwULaugLc>

<https://www.youtube.com/watch?v=d938SUXYgYM>

Congratulations to Alan Shannon VK4SN.

"12 hours on 40m only for me this weekend in the WPX RTTY contest. 281 contacts for 327k. Broke the VK 40m record. The 40m 4 square antenna works amazing. Thanks for the contacts."



Sourced from Alan's Facebook page 10 Feb 25

RigExpert Office in Kyiv, Ukraine Destroyed

I received the following report about the destruction of the Kyiv administrative office.

"Today, our administrative office was completely destroyed by a Russian ballistic missile. Despite the severe damage, we are relieved to report the most important - all our team members are safe.

Even though this difficult situation, the RigExpert team is committed to restoring operations as soon as possible to continue providing our great products to you. We are working tirelessly to minimize delays and fulfill our commitments. Besides, we are maintaining our usual customer support operations.

Please, don't hesitate to get in touch. Our team appreciates your understanding during this challenging time. We will let you know about our progress. Stay strong, and thank you for being with us!"

Source: Daily DX, 11 February 2025

40 metre Band Plan Review by WIA/IARU Region 3

Some readers will recall the WIA's initiative to review the Band Plan from August/September in 2024. Responsibility for this initiative was passed to IARU Region 3 at the November conference.

We haven't seen any news from IARU Region 3 following their November conference in Bangkok, so on 24th January we wrote to them asking for an update. On the 30th January we received a response from IARU Region 3 Secretary, Ken Yamamoto JA1CJP

"we discussed the band plan at General Conference in Bangkok, last November. However, no immediate result was achieved and IARU Region 3 HF Band Plan Committee will carry on study and discussions.

Main issue on 40 m band plan is de-fact weak signal mode segment in the midst of phone segment. Last term (2021-2024), R3 HFBPC couldn't gather participation in discussion from Member Societies and couldn't reach any conclusion on 40 m.

So, it was agreed at the Conference to re-activate the R3 HFBPC and I'm trying find out suitable representatives from Member Societies to discuss Band Plan issues."

In a nutshell, no changes were agreed. It appears that after at least two to three years of consultation with stakeholders by the WIA, IARU Member Societies have not reviewed or agreed with the proposal. For now, at least, it's business as usual on 40 metres.

And there's no news from the WIA since, other than a Facebook post advising they are busy "herding the cats" in Region 3. I sure hope that was nothing more than a poor choice of words by the WIA; it's not the most effective way to bring people together (in fact it's quite disrespectful) across countries, many with very different cultures and expectations.

To read the full story on the 40 metre band plan review click here [Save40cw](#)

POTA - New Website for tracking your activations

POTA activators take note! This new website will tell you which parks you've activated and which you haven't. That can help plan future activations. I've activated all the green ones. Red ones haven't been activated by anyone. <https://newparks.ianrenton.com/>

Source: VK3YE Radio Books Facebook page

Norfolk Island - Memories of local Amateurs

Many of us will remember the stalwart of Norfolk Island DX, Jim Smith VK9NS. Jim died in February 2009, following a short illness. He was 80. A noted DXer, Jim was #81 on the Islands on the Air (IOTA) Honour Roll.

Abe VK3ABE was kind enough to send us a photo of himself and Jim when Abe visited Jim and Kirsti's shack circa 2000.



More recently, the VK9NT team got to know John VK9JA and his wife Florence quite well. On our annual trips to Norfolk Island we'd drop in to visit John, and on a couple of occasions he visited our QTH for a cuppa and chat.

Sometime around 2016 we visited John and set him up with an FT-950 (donated with support from the VK community) and a basic dipole enabling him to get back on air.

The photo is Chris VK3QB and Luke VK3HJ with John VK9JA in front of his home on Norfolk Island.

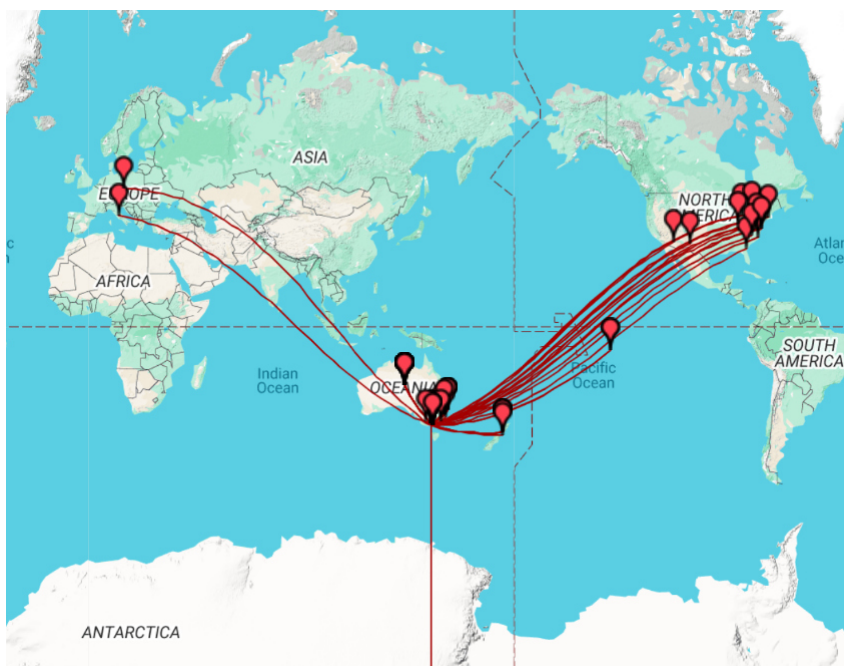
Sadly, John died early in 2023,



Create a colourful and useful world map of your QSOs

Would you like to create a cool image of your recent contest QSOs? Or maybe a great weekend DX operating session? Head over to this website, load your log (careful not to make it too big), complete a few fields and before you know it, you'll have a nice image.

<http://tools.adventureradio.de/analyzer/>



Solar & Space weather Reports

“After 19 years SolarHam will be taking an extended break. The current world events and life in general has made me want to refocus my attention on what matters most, my daughter, my family and my health. Thank you all for the support over the past two decades, I really cannot thank you enough. Space Weather will always remain a passion of mine, but as of right now my heart is not fully committed and that is not fair to you my followers. I hope to return once I feel well enough. Sorry for the sudden departure and I hope you understand.



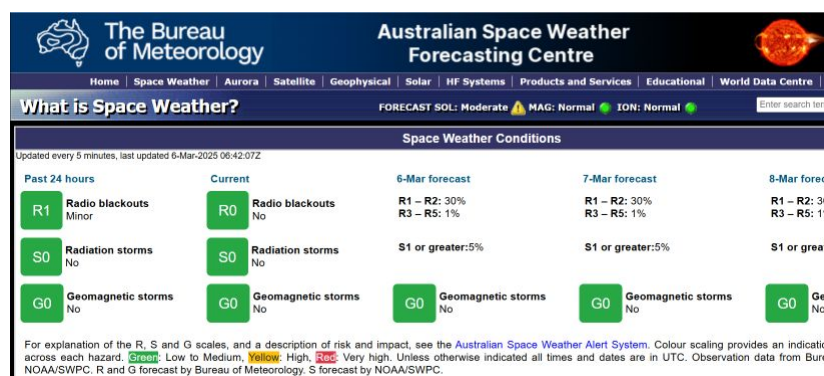
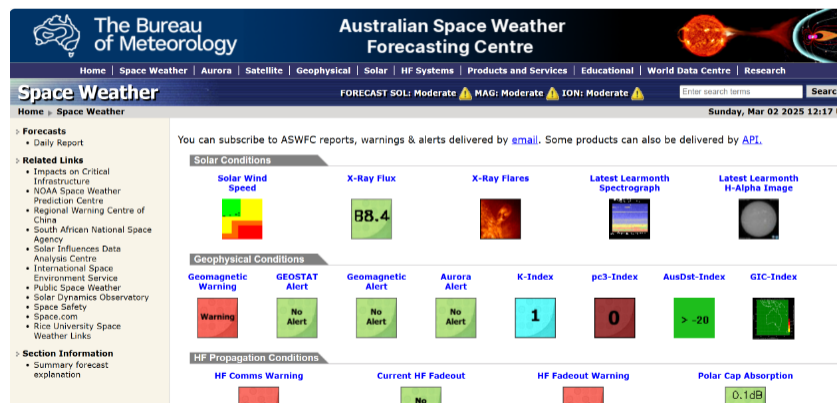
Kevin (SolarHam).” Source: SolarHam Facebook page

We are very sad to hear this news from Kevin and wish him well.

It will be hard to fill the gap left by Kevin, but we encourage VK readers to check out our own **Space Weather Service** hosted by the Bureau of Meteorology. Their data and reports are focused very much on our part of the world, and some of the local reporting is definitely worth adding to your favourites folder or favourites bar on your browser.

https://www.sws.bom.gov.au/Space_Weather

It really is a fantastic service provided by our Federal Government, with local reports; check out the HF Propagation Condition reports as well as the Ionospheric Conditions reports.





GGREC HAMFEST SALE 2025



On **Saturday, July 5** the Gippsland Gate Radio & Electronics Club will be hosting a Hamfest sale. The venue is at the **Longwarry Community Hall** in Longwarry, approx 60km East of Dandenong, Vic. The venue is easy to find. It is just 3 km South of the freeway interchange, 150 metres South of the Longwarry train station and level crossing. Tea / Coffee and sausage sizzle will be available on the day.



For Buyers:

Doors open at 10:00 for buyers. Entry fee is \$7. Entry includes a ticket for a Door Prize drawn at 1:30pm.

For Sellers:

Doors open at 8:30 for stall holders. Fees are \$18 per table. Tables are approx 1.8 x 0.8m. Tables must be paid for in advance of the event via EFT. A maximum of 30 tables are available. Table hire includes entry for two persons. **EFT use BSB 633000 Account 146016746**. Bookings are not confirmed until a booking number has been issued by the booking coordinator. No trading before 10:00 am please.

Direct enquiries to Ian Jackson VK3BUF via: hamfest@ggrec.org.au or call 5644 3118